## **ABSTRACT**

Non-ordinal conversion is performed between signals with at most one bit asserted and respective codes, such as between priority signals from a content addressable memory (CAM) priority encoder to respective non-ordinal codes. Address encoding includes non-ordinal conversion followed by recoding to obtain ordinal address codes. Signal converting circuitry includes neighboring switching elements such as transistors that are differently offset from neighboring input lines, allowing tight pitch between input lines. To allow for offset, each transistor can have no more than one neighboring transistor. For example, neighboring input lines can have complementary sets of transistors.